

AMENDMENTS TO THE CLAIMS

A complete listing of the claims, including their current status, is set forth below.

1-37 (Cancelled)

38. (Currently amended) A cell-free composition comprising:

an isolated Tankyrase H protein; and

an exogenously added a- source of ADP ribose;

wherein said isolated Tankyrase H protein exhibits poly-ADP ribose polymerase activity and has an amino acid sequence that is at least 95% identical to the entire contiguous sequence of SEQ ID NO:3 or SEQ ID NO:4.

39. (Currently amended) The composition of claim 38, further comprising:

a candidate **bioactive** agent.

40. (Currently amended) The composition of claim 39, wherein said candidate **bioactive** agent is an organic molecule of less than 2,500 Da.

41. (Currently amended) The composition of claim 39, wherein the candidate **bioactive** agent is a peptide.

42. (Previously presented) The composition of claim 38, wherein said composition is a cell lysate.

43. (Previously presented) The composition of claim 38, wherein said Tankyrase H protein is a fusion protein.

44. (Cancelled)

45. (Withdrawn – currently amended) A method of ~~using the composition of claim 38,~~ comprising:

contacting the composition of claim 38 a cell-free composition comprising:
an isolated Tankyrase H protein; and
an exogenously added source of ADP ribose;
wherein said isolated Tankyrase H protein exhibits poly-ADP ribose polymerase
activity and has an amino acid sequence that is at least 95% identical to the entire
contiguous sequence of SEQ ID NO:3 or SEQ ID NO:4

with a test agent; and

determining any effect of said test agent on said poly-ADP ribose polymerase activity.

46. (Withdrawn) The method of claim 45, wherein said test agent is an organic molecule of less than 2,500 Da.

47. (Withdrawn) The method of claim 45, wherein the test agent is a peptide.

48. (New) A cell-free composition comprising:

an isolated Tankyrase H protein; and

labeled nicotinamide adenine dinucleotide (NAD);

wherein said isolated Tankyrase H protein exhibits poly-ADP ribose polymerase activity and has an amino acid sequence that is at least 95% identical to the entire contiguous sequence of SEQ ID NO:3 or SEQ ID NO:4.

49. (New) The composition of claim 48, further comprising:
a candidate agent.

50. (New) The composition of claim 49, wherein said candidate agent is an organic molecule of less than 2,500 Da.

51. (New) The composition of claim 49, wherein the candidate agent is a peptide.

52. (New) The composition of claim 48, wherein said composition is a cell lysate.
53. (New) The composition of claim 48, wherein said Tankyrase H protein is a fusion protein.
54. (New) A method comprising:
contacting a cell-free composition comprising:
an isolated Tankyrase H protein; and
labeled nicotinamide adenine dinucleotide (NAD);
wherein said isolated Tankyrase H protein exhibits poly-ADP ribose polymerase activity and has an amino acid sequence that is at least 95% identical to the entire contiguous sequence of SEQ ID NO:3 or SEQ ID NO:4
with a test agent; and
determining any effect of said test agent on said poly-ADP ribose polymerase activity.
55. (New) The method of claim 54, wherein said test agent is an organic molecule of less than 2,500 Da.
56. (New) The method of claim 54, wherein the test agent is a peptide.